

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICE OF RESEARCH AND DEVELOPMENT RISK REDUCTION ENGINEERING LABORATORY

CINCINNATI, OHIO 45268

February 24, 1995

REPLY TO: Releases Control Branch U.S. EFA (MS-104) 2890 Woodbridge Avenue Edison, N.J. 08837

MEMORANDUM

SUBJECT: Pre-Final Construction Review of SVE System

Carrier Plant, Collierville, Tennessee, EPA Region IV

FROM:

Chi-Yuan Fan Chip

Environmental Engineer, Releases Technology Section,

RCB

Superfund Technology Demonstration Division

TO:

Joan Mattox

Technical Support Branch

Superfund Technology Demonstration Division

Per Beth Brown's request through your office, I attended a project review meeting at the Carrier's facility in Collierville, Tennessee on 23rd February 1995. Attached are copies of the meeting agenda and the following topics that were discussed during the review meeting:

- o Saggested checklist for conducting SVE system postconstruction inspection at Carrier Collierville site.
- o SVE process and instrumentation diagram (Figure 1: P&ID).
- o SVE system installation (Figure 2).

The suggested checklist was based on the information provided on the P&ID (attached Figure 1). The list was distributed and discussed extensively during the meeting. EnSafe will finalize the listed items to reflect the actual installation. The vapor sampling and flow measurement ports at each wellhead have not yet installed at present time. For SVE performance monitoring and verification soil samples, it was suggested that two sampling locations (SSI and SS2) as shown on Figure 2 be conducted at depth of 4, 8, 12, and 15 ft below ground surface. The SVE system was not operatable at this time, and a post-construction inspection was re-scheduled for 3/20/95.

Attachments.

cc: Beth Brown

OPTIONAL FORM 99 (7-90)



FAX TRANSMITTAL From Evan Fam.

Dept/Agency 4 Phone # (908) 906 - 6824

Fax (404) 347 - 1695 Fax (908) 321 - 6640

FEB-13-1995 14:14

P.02/02

MEETING AGENDAR

Meeting Description MPA 8VE System Pre-Final Construction Inspection

Results Desired Punch-list of Final Construction Items, Determine Need for Final Inspection

Date February 23, 1995

Time 0900

Location Certier Collierville Plant

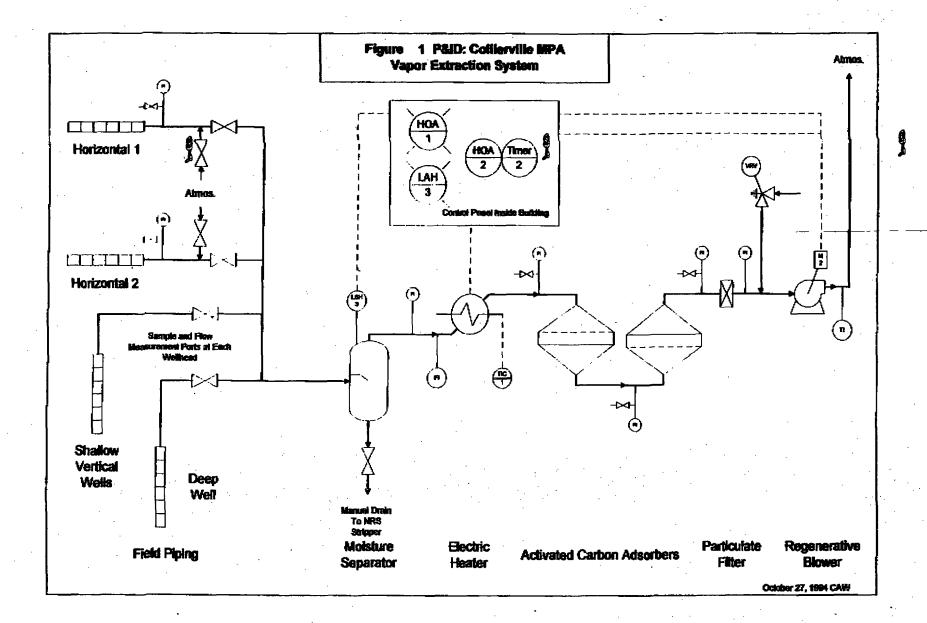
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_	Seda Review of O&M Plan	·			1030-1100
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_	oussion; Need/Schedule/Attend	ees for Final Inspection	3/20 NK	<u> </u>	1130-1200
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	Date:	Tusbeccol(s):	
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Time	Inspected Item	Remarks	
	Emission Stack		
	Sampling port No.		
	Temp. indicator No.		
	Regenerative Blower	vibration/level	
· · · · · · · · · · · · · · · · · · ·	Electric motor	rotation speed: rpm	
	Control system	auto/manual override	
	Vacuum relief valve	auto-vacuum break setting	
	Air inlet valve No.	type:	
	Vacuum gauge No.	range: - mm Hg/in H	<u> </u>
	Particulate Filter		
	Vacuum gauge No.	range: - mm Hg/in H;	20
		<u> </u>	
	Activated Carbon Unit 1		
	Activated Carbon Unit 2		
	Vacuum gauge No.	range: - mm Hg/in H	50
	Sampling port No.		
	Sampling port No.		
	Electric Reater	output: BTU/hr.	kw
	Temp. indicator/contr		
	THE PARTY OF THE P	temp.setting: F/C par	
		rampiadritidi tvc ba	12 =
	Flow Meter		cfm
	Flow indicator No.	range: - scfm	
	Vacuum gauge No.	range: - mm Hg/in H	20
•	Moisture Separator	capacity: gal./cu	-
	Water level indicator		منلله
	Water Tavel Indicator		
	##	panel high level alarm	
	Vacuum dauge No.	range: - mm Hg/in H:	<u> 50</u>
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	Deep Extraction Well	No. SVE-1B	
	Valve No.	type:	
	Vacuum gauge No.	range: - mm Hg/in H	50
	Sampling port No.		
	Flow measur.port No.		

	Date:/	Inspector(s):
<u>ıe</u>	Inspected Item	Remarks
	Shallow Extraction Well	
 .	Valve No.	type:
		range: - mm Hg/in H20
	Sampling port No.	
	Flow measur.port No.	
		
	Shallow Extraction Well	
_	Valve No.	type:
		range: - mm Hg/in H20
	Sampling port No.	
-	Flow measur.port No.	
	304	
	Shallow Extraction Well Valve No.	
-	Vacuum gange No	type: range: - mm Hg/in H20
	A	
	Flow measur.port No.	
_		
	Shallow Extraction Well	No. SVE-2C
	Valve No.	type:
_	Vacuum dauge No.	range: - mm Hg/in H20
-	sampling port No.	
-	Flow measur.port No.	
_		
_	Shallow Extraction Well	No. SVE-2D
_	Valve No.	LYD4:
_	Sampling port No.	range: - mm Hg/in H20
-	Flow measur.port No.	
		
	- ·	

•	Date:	Inspector(s):	
		•	
Time	Inspected Item		rks
	Shallow Extraction Well	No SVE-28	
	Valve No.	type:	
	Vacuum gauge No.		mm Hg/in H2O
	Sampling port No.	TEMA	THE THEY THE HEAD
	Flow measur.port No.		
	FIOW MEEBUTIOUTE NO.		
	40-4		
	<u> Horizontal Extract.Well</u>	No. SVE-1H	
	Valve No.	type:	
	Vacuum gauge No.	range: -	mm Ha/in H20
	Sampling port No.		
	Flow measur.port No.		
	Air inlet valve No.	,	
	Horizontal Extract.Well	No. SVE-2H	
	Valve No.	type:	
	Vacuum gauge No.	range: -	mm Ha/in H2O
	Sampling port No.		
	Flow measur.port No.		
	Air inlet valve No.		
	Control Panel		<u> </u>
	Electric motor	· · · · · · · · · · · · · · · · · · ·	
	In-line heater	temperature	
	Water level		
	Menitoring Well/Point #		
	Pressure monitoring		
	Sampling port		
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	_Monitoring Well/Point #		
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	Monitoring Well/Point #	•	
	Pressure monitoring		
_	Sampling port		
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	Date:	Inspector(s):
Time_	Inspected Item	Remarks
	%Chitoring Well/Point #	
	Pressure monitoring Sampling port	
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	Sampling port	
	Monitoring Well/Point # Pressure monitoring	
	Sampling port	



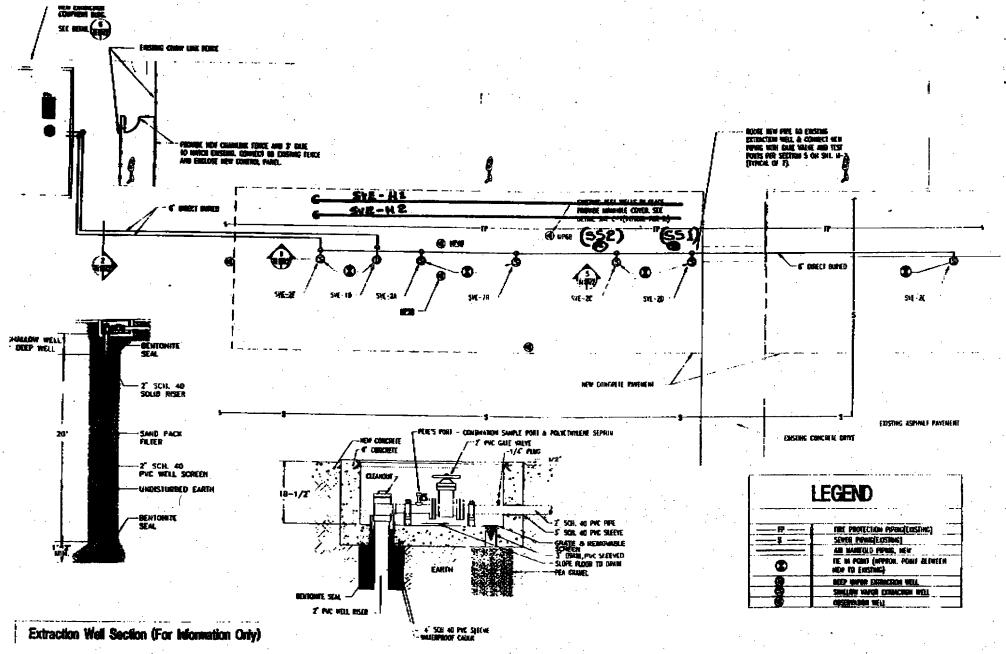


Figure 2: SVE System Installation

•	Date://	<pre>Inspector(s):</pre>	
Time	Inspected Item	Remarks	
TTITE	Inspected Item	Remarks	
	Emission Stack		
	Sampling port No.		
	Temp. indicator No.		
	Regenerative Blower	vibration/level	
	Electric motor	rotation speed:	rpm
	Control system	auto/manual overrid	e
	<u>Vacuum relief valve</u>	auto-vacuum break s	<u>etting</u>
	Air inlet valve No	type:	
	Vacuum gauge No.	range: - mm	Hg/in H2O
	Particulate Filter		
······································	Vacuum gauge No.	<u>range: - mm</u>	Hg/in H2O
			•
	Activated Carbon Unit 1	capacity: Ib/AC	type:
	Activated Carbon Unit 2	capacity: Ib/AC	type:
	Vacuum gauge No.	<u>range: - mm</u>	Hq/1N H20
	Sampling port No. Sampling port No.		
	Sampiffing port No.		
	Electric Heater	output: BTII/hr	kw
	Temp. indicator/contr	temp.setting:	F/C local
			F/C panel
			<u> </u>
	Flow Meter	flowrate range:	- scfm
	Flow indicator No.		scfm
	Vacuum gauge No.		Hq/in H2O
<u>.</u>	Moisture Separator	capacity:	gal./cu.m.
	Water level indicator	local	
		<u>panel high level a</u>	
	Vacuum gauge No.	range: - mm	Hg/in H2O
•		•	
	·		
	Deep Extraction Well		
	Valve No.	type:	/
	Vacuum gauge No.	<u>range: - mm</u>	Hg/in H2O
	Sampling port No.		
	Flow measur.port No.	-	
			

	Date:/	Inspector(s):	
<u>Time</u>	Inspected Item	Rema	rks
	Shallow Extraction Well		
	Valve No.		
	Vacuum gauge No.		mm Hg/in H2O
	Sampling port No.		
	Flow measur.port No.		
	· · · · · · · · · · · · · · · · · · ·		
		·	
	Shallow Extraction Well	No. SVE-2A	
	Valve No.	type:	
	Vacuum gauge No.	range: -	mm Hg/in H2O
	Sampling port No.		
	Flow measur.port No.		
	Shallow Extraction Well		
	Valve No.	type:	
	Vacuum gauge No.	range: -	mm Hg/in H2O
	Sampling port No.		
	Flow measur.port No.		
			
<u> </u>			
			,
	<u>Shallow Extraction Well</u>		
	Valve No.	type:	
	Vacuum gauge No.	range: -	mm Hg/in H2O
	Sampling port No.		
	Flow measur.port No.		
 	Shallow Extraction Well		
	Valve No.	type:	
	Vacuum gauge No.	range: -	mm Hg/in H2O
	Sampling port No.	·	
	Flow measur.port No.	·	·_
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	Date:/	Inspector(s):_	
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<u>Time</u>	<u>Inspected Item</u>	Remai	<u>cks</u>
	Shallow Extraction Well	No SVF-2F	
	Valve No.	cype.	mm Hg/in H2O
	Vacuum gauge No.	range: -	nun Hg/III H20
	Sampling port No.		
	Flow measur.port No.		
		•	
	Horizontal Extract.Well		
	Valve No.	type:	
	Vacuum gauge No.		
	Sampling port No.		
	<u>Flow measur.port No.</u>		
	Air inlet valve No.	-	
	Horizontal Extract.Well	No. SVE-2H	
	Valve No.		
	Vacuum gauge No.	range: -	
	Sampling port No.	241.901	
	Flow measur.port No.		
	Air inlet valve No.		
	AII INIEC VAIVE NO.		
	Control Panel		
	Electric motor		
	In-line heater	temperature	
	Water level		
		<u> </u>	
	<pre>Monitoring Well/Point #</pre>		
	Pressure monitoring		
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	Pressure monitoring	- · · · · · · · · · · · · · · · · · · ·	
	Sampling port		

	Date:/	Inspector(s):
Time	Inspected Item	Remarks
	Monitoring Well/Point #	
	Pressure monitoring	
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	Sampling port	